

ABSTRACT

Fast macrodiversity switching (FMS) dynamically switches radio links used for traffic and control channels for a mobile station among a number of base transceiver stations (BTS) without changing the radio resource, that is, using the same frequency and time slot combination (TDMA) or frequency and spreading code combination (CDMA). The traffic channel switching is under control of zone managers. Each BTS includes a zone manager where a host BTS has its zone manager designated as a host zone manager and other BTSs (assistant BTSs) have their zone managers designated as assistant zone managers. The control by the host and assistant zone managers includes switching down-link signals to and up-link signals from mobile stations among base transceiver stations which include broadcast channels (non-switched) and dedicated (switched) channels. Measurements of the wireless signals are made at macrodiverse locations. Zone managers process the measurements to determine preferred ones of the transceiver stations for particular dedicated channels for a particular mobile station.